

Sub D1
~~passing said control signal from said step of searching for said identified control~~
signal from said processor to said [controlled] at least one controllable device; and
communicating information on the passing of said identified control signal from
~~said receiver station to said remote station.~~

3. The method of Claim 2 wherein said receiver station is a television receiver station, said television receiver station receiving signals containing television programming information.

4. The method of Claim 2 wherein said control signal in said step of identifying is directed to an external device.

5. The method of Claim 4 wherein said external device is a storage device.

N.E. ~~6. The method of Claim 4 wherein said external device is a heater~~

~~7. The method of Claim 4 wherein said external device is an air conditioner.~~

~~8. The method of Claim 4 wherein said external device is a radio receiver.~~

~~9. The method of Claim 4 wherein said external device is a computer.~~

~~10. The method of Claim 4 wherein said external device is a video recorder.~~

11. The method of Claim 4 wherein said external device is a printer.

~~12. The method of Claim 4 wherein said external device is a laser disk.~~

Sub D2
Q2
cont.
13. A multimedia receiving apparatus for gathering information on the use of [an] a control signal at said apparatus comprising:

a plurality of input ports for receiving multimedia signals;

an output port;

a processor operatively connected to said plurality of input ports and said output port[s];

said processor programmed for:

identifying a control signal from at least one of said plurality of input ports;

~~passing said control signal from said identifying from said processor to said output port;~~

~~communicating information of the passing of said identified control signal from said step of passing to a remote data collection station.~~

14. The apparatus of Claim 13 wherein said processor is programmed for: storing said information on the passing of said identified control signal on a storage device before said step of communicating; and

~~delaying said step of communicating for a predetermined time.~~

15. The apparatus of Claim 14 wherein said predetermined communication delay is calculated to reduce communication costs.

16. The apparatus of Claim 13 wherein said communication of information from said apparatus to said remote data collection station uses a telephone interface.

17. The apparatus of Claim 13 where said output port is connected to an external device.

18. The method of Claim 2 further comprising the step of: generating a bill for the use of said control signal at said remote station based on the identification and passing of said control signal at said receiver station.

~~19. The method of Claim 2 further comprising the steps of:~~

~~storing information on the passing of said identified control signal on a storage device at said receiver station before said step of communicating;~~

~~delaying said step of communicating for a predetermined time.~~

20. The apparatus of Claim 13 wherein said output port is oppressively ~~connected to an internal device.~~

21. A method of communicating subscriber station information from a subscriber station to at least one [or more] remote collection station[s], said method comprising the steps of:

(1) inputting an instruct signal which is effective at said subscriber station to control an apparatus and at least one of a code [or] and a datum to serve as evidence of at least one of the passing of said instruct signal to a controllable apparatus [or of] and the functioning of said controllable apparatus in response to said instruct signal;

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cont.
(2) detecting the presence of at least one of an instruction, said code [or] and said datum, [associated with said instruct signal,] which is effective at the subscriber station to at least one of generate at least one [or more] subscriber station specific data [or] and to select and assemble a plurality of specific subscriber station specific data into a [signal string] record;

(3) processing at the subscriber station at least one [or more] locally inputted [data] datum and performing, in response to said detected instruction, at least one of:

(a) generating at least one [or more] subscriber station specific [data] datum and communicating said generated at least one [or more] subscriber station specific data to a transmitter; and

(b) selecting and assembling into a [signal string] record a [specific] plurality of subscriber specific data and communicating said [signal string] record and said selected specific plurality of subscriber specific data to a transmitter; and

(4) transmitting at least one of said communicated at least one [or more] generated subscriber station specific [data [or]] datum and said communicated [signal

string] record and [specific] plurality of subscriber specific data to said at least one [or more] remote collection stations.

22. The method of claim 21, wherein said instruct signal is input by a subscriber, said method further comprising the steps of:

storing a subscriber instruction to receive at least one [or more] of specific mass medium program[s], data, news items, [or] and computer control [instructions]; instructions; and

receiving at least one [or more] of specific mass medium programs, data, news items, [or] and computer control instructions in accordance with said instruction.

23. The method of claim 21, wherein said instruct signal is input by a subscriber, said method further comprising the steps of:

storing a subscriber instruction to at least one of process [or] and present at least one [or more] of mass medium programs, data, news items, [or] and computer control [instructions] instructions in a specific fashion; and at least one of

processing [or] and presenting at least one [or more] of specific mass medium programs, data, news items, [or] and computer control instructions in accordance with said instruction.

24. The method of claim 21, wherein said instruct signal is detected in an information transmission from a data or programming source, said method further comprising the steps of:

programming a processor to respond to an instruct signal communicated from a data or programming source;

receiving an information transmission from at least one of a data [or] and programming source;

inputting at least some of said information transmission to a control signal detector;

detecting said instruct signal in said information transmission; and

passing said instruct signal to said processor.

25. A method of signal processing at a receiver station, said receiver station including a receiver and a processor, said method comprising the steps of:

receiving on said receiver identification signals that identify specific signal content for at least one of a plurality of one of concurrent broadcast [or] and cablecast signal transmissions;

providing a comparison signal to said processor;

comparing said comparison signal to said identification signals and generating a control signal identifying a desired one of said plurality of one of broadcast [or] and cablecast signal transmissions;

tuning said receiver, based on said generated control signal, to receive said desired one of said plurality of one of broadcast [or] and cablecast signal transmissions;

inputting at least some of said desired signal transmission to said processor; and

responding to (i) an instruct signal detected in said desired signal transmission which is effective to control a receiver station apparatus and (ii) a code or datum to serve as evidence of the passing of said instruct signal to a controllable apparatus or of the functioning of said controllable apparatus in response to said instruct signal.

26. A method of controlling a remote intermediate [data] transmitter station to communicate [data] at least one instruct signal to at least one [or more] receiver station[s], with said remote transmitter station including at least one of a broadcast [or] and cablecast transmitter [for transmitting at least one [or more] signal[s] which [are] is effective at a receiver station to instruct one of a computer [or] and a processor], a plurality of selective [transmission] transfer devices each operatively connected to said at least one of said broadcast [or] and said cablecast transmitter [for communicating a unit of data], a [data] receiver for receiving said at least one instruct signal from at least one origination transmitter station, a control signal detector, and one of a controller [or] and computer capable of controlling at least one [or more] of said plurality of selective [transmission] transfer devices, and with said remote transmitter station adapted to detect the presence of at least one [or more] control signal[s], [to control the communication of specific instruct signals in response to detected specific control signals,] and to deliver at [its] said at least one of said broadcast [or] and said cablecast transmitter said at least one [or more] instruct signal[s], said method [of communicating] comprising the steps of:

(1) receiving [an] said at least one instruct signal and at least one of a code [or] and a datum [to be transmitted by the remote intermediate data] at said at least one origination transmitter station and delivering said at least one instruct signal and said at least one of said code [or] and said datum to at least one origination transmitter, said at least one instruct signal being operative at [a] said at least one receiver station to control [a receiver station] at least one controllable apparatus, said at least one of said code [or] and said datum being operative at said at least one receiver station to serve as evidence

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~~of [the] at least one passing of said at least one instruct signal to [a] said at least one controllable apparatus or of the functioning of said at least one controllable apparatus in response to said at least one instruct signal;~~

~~(2) receiving said at least one [or more] control signal[s] which at [the] said remote intermediate data transmitter station operates to control the communication of said at least one instruct signal and said at least one of said code and said datum; and~~

~~(3) transmitting said at least one [or more] control signal[s] to said at least one origination transmitter before a specific time.~~

B3 cont.
27. The method of claim 26, further comprising the step of embedding a specific one of said at least one [or more] control signal[s] one of in said instruct signal [or] and in an information transmission containing said instruct signal before transmitting said instruct signal to said remote transmitter station.

28. The method of claim 26, wherein said specific time is a scheduled time of transmitting one of said instruct signal [or] and some information associated with said instruct signal from said remote intermediate data transmitter station and said at least one [or more] control signal[s are] is effective at said remote intermediate data transmitter station to control at least one [or more] of said plurality of selective transmission devices at different times.

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~~29. A method of processing signals at a receiver station having a computer and a television monitor to deliver at the television monitor at least one of a combined [or] and sequential presentation of a program and a user specific output, said method comprising the steps of:~~

storing user data of interest;

receiving from a television programming source an information transmission containing television programming;

transferring said television programming to said television monitor and displaying the television programming;

detecting in said information transmission at least one [or more] instruct signal[s] which [are] is operative to control a receiver station apparatus and at least one of a code [or] and a datum to serve as evidence of [the] at least one of (i) a passing of said at least one instruct signal to at least one controllable apparatus [or] and [of] (ii) the functioning of said at least one controllable apparatus in response to said at least one instruct signal;

controlling said computer based on said detected at least one [or more] instruct signal[s], said step of controlling comprising:

- (1) selecting [a specific] at least a portion of said stored user data of interest;
- (2) communicating said selected [specific] at least said portion of said stored user data of interest to said television monitor; and subsequently
- (3) ceasing to communicate said [specific] select at least said portion to said television monitor; and

evidencing said at least one of said combined [or] and said sequential output of said received television programming and said selected specific portion of said stored user data of interest [is delivered at said television monitor in the period of time between said step of communicating said selected specific portion to said television

~~monitor and said step of ceasing to communicate said selected specific portion to said television monitor] by storing said at least one of said code and said datum in a record.~~

30. The method of claim 29, further comprising one [from the group consisting] of:

programming said receiver station to process viewer data of interest and to respond to at least one [or more] instruct signal[s] associated with a television program; receiving a command one of embedded in [or] and associated with a signal that contains a television program;

storing a locally input command that one of designates [or] and specifies one of:

- (1) a television program to be one of displayed [or] and recorded;
- (2) a fashion in which to present one of a television program [or] and some computer output; and
- (3) a time in which to display one of some television programming [or] and computer output;

controlling one of a processor [or] and computer to process a viewer reaction to one of a unit of programming [or] and an image displayed at said television monitor, said step of controlling comprising the steps of:

- (1) assembling a record that includes additional data besides said viewer reaction; and
- (2) transmitting said record to a remote data collection station;

controlling one of a processor [or] and computer to process a viewer reaction to one of a unit of programming [or] and an image displayed at said television monitor, ~~said step of controlling comprising the steps of:~~

(1) detecting a datum that identifies one of a unit of programming [or]
and an image displayed at said television monitor; and

(2) transmitting said datum to a remote data collection station;

controlling one of a processor [or] and computer to process a viewer reaction to a
one of unit of programming [or] and an image displayed at said television monitor, said
step of controlling comprising the steps of:

(1) storing a datum that identifies one of a unit of programming [or]
and an image displayed at said television monitor; and

(2) passing data of the availability, one of use [or] and usage of one of
programming [or] and an image to one of a processor [or] and
computer that controls one of the selection [or] and communication
of program materials for display at said receiver station; and

controlling one of a processor [or] and computer to process a viewer reaction to
one of a unit of programming [or] and an image displayed at said television monitor,
said step of controlling comprising the steps of:

(1) one of controlling a receiver to receive [or] and a storage location to
communicate a unit of programming associated with said unit of
programming or image or in response to said viewer reaction; and

(2) outputting said communicated unit of programming at an output
device of said receiver station.

31. A method of generating and encoding signals to control a presentation
comprising the steps of:

~~receiving and storing a program that contains video information;~~

~~receiving [an] at least one instruction and at least one of [a] code [or] and a
datum, said at least one instruction having effect at a user station to control a receiver
station apparatus, said at least one of said code [or] and said datum having effect at said
user station to serve as evidence of at least one of [the] a passing of said at least one
instruction [instruct signal] to at least one controllable apparatus [or] and of [the] at
least one function[ing of] performed by said at least one controllable apparatus in
response to said at least one instruction [instruct signal];~~

~~encoding said at least one instruction, said step of encoding translating said at
least one instruction to at least one control signal, said at least one control signal for
directing a processor at a user station to [perform said effect indicated by said
instruction with said program] control said at least one controllable apparatus;~~

~~storing said at least one control signal from said step of encoding in conjunction
with said program; and~~

~~storing said at least one of said code [or] and said datum from said step of
receiving in conjunction with said program and said at least one control signal.~~

32. The method of claim 31, wherein supplemental program material is stored
at the same location as said processor and said control signal from said step of encoding
directs said processor to generate a video overlay that is coordinated with said video
information in said program, said method further comprising one step of the group
consisting of:

~~storing supplemental program material in conjunction with said program and
said control signal; and~~

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~~storing a second control signal in conjunction with said program and said control~~

signal from said step of encoding, said second control signal having effect at a user station to one of query a remote station [or] and receive supplemental program material in a broadcast or cablecast transmission.

D3 cont.
33. The method of claim 31, wherein said control signal from said step of encoding directs said processor to generate a video overlay that is coordinated with said video information in said program, said method further comprising one step of the group consisting of:

transmitting a combined video signal from said program and said video overlay generated by said processor over one of a broadcast [or] and cablecast network to a plurality of receiver stations; and

transmitting a combined video signal from said program and said video overlay generated by said processor to a co-located video display.

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~~34. The method of claim 31, further comprising the steps of:~~

receiving a second instruction, said second instruction being one of the group consisting of:

- (1) an instruction which is effective at a user station to generate some output to be associated with said program;
- (2) an instruction which is effective at a user station to generate some output to be associated with said product, service, or information presentation;

~~(3) an instruction which is effective at a user station to display one of a combined [or] and sequential presentation of a mass medium program and a user specific datum;~~

(4) an instruction which is effective at a user station to process a user reaction to said program;

(5) an instruction which is effective at a user station to communicate to a remote station one of a query in respect of information to be associated with said program [or] and to enable display of said program;

(6) an instruction which is effective at a user station to control a user station to receive information to supplement said program;

(7) an instruction which is effective at a user station to process a digital television signal which is separately defined from standard analog television; and

(8) an instruction which is effective at a user station to serve as a basis for enabling an output device to display one of at least some of said program [or] and for enabling a processor to process some executable code.

encoding said second instruction, said second step of encoding translating said second instruction to a second control signal, said second control signal for directing said ancillary processor to perform said specified second effect indicated by said second instruction with said program; and

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~~storing said second control signal from said second step of encoding in~~
conjunction with said program.

35. The method of claim 31, further having one the group consisting of:
embedding said control signal in the non-visible portion of a television signal;
embedding a code in said program that enables one of a computer [or] and
controller to control a presentation of said program in accordance with said control
signal;

D3 cont.

communicating a program unit identification code and storing said program unit
identification code at a storage location associated with said program; and

communicating to and storing at a storage location associated with said program
some information to evidence one of an availability, use, [or] and usage of said program
at a user station.

36. A method of controlling a network [of] having a plurality of receiver
stations each of which includes a broadcast or cablecast signal receiver, at least one
processor, a signal detector, said signal detector adapted to receive signals from a
broadcast or cablecast signal, [and] said processor programmed to respond to signals
from said detector, [and] said method [of controlling] comprising the steps of:

(1) receiving at at least one of a broadcast [or] and a cablecast transmitter
station [an] (i) at least one instruct signal which is effective at said plurality of receiver
stations to control at least one controllable [receiver station] apparatus and (ii) at least
one of a code [or] and a datum to serve as evidence of [the] at least one of a passing of
said at least one instruct signal to [a] at least one controllable apparatus [or] and [of the]

~~a functioning of said at least one controllable apparatus in response to said at least one instruct signal;~~

~~(2) transferring said at least one instruct signal and said at least one of said code [or] and said datum [from said transmitter station] to at least one transmitter;~~

~~(3) receiving at least one [or more] control signal[s] at said transmitter station, said control signal[s] designating at least one receiver station of said plurality of receiver stations in which said at least one instruct signal is addressed; and~~

~~(4) transferring said at least one [or more] control signals from [said transmitter station to a] said at least transmitter, said at least one transmitter [station] at least one of broadcasting [or] and cablecasting said at least one instruct signal, said at least one of said code [or] and said datum, and said at least one [or more] control signal[s] to said plurality of receiver stations.~~

37. The method of claim 36, wherein one of said instruct signal [or] and said control signal is embedded in one of the non-visible portion of a television signal [or] and a multichannel broadcast or cablecast signal that contains video.

38. The method of claim 36, wherein said at least one [or more] control signal[s] identifies two of said plurality of receiver stations asynchronously and each of said two receiver stations receive and respond to said instruct signal asynchronously.

39. The method of claim 36, wherein a switch communicates signals selectively from a receiver and a one of memory [or] and recorder to a transmitter, said method further comprising one from the group consisting of:

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concl.

detecting a signal which is effective at the transmitter station to instruct communication;

determining a specific signal source from which to communicate a signal to a transmitter;

controlling said switch to communicate a signal to said transmitter in response to a signal which is effective at the transmitter station to instruct communication;

controlling said switch to communicate a signal from a selected signal source;

and

controlling said switch to communicate to one of said memory [or] and recorder a signal which is effective at the receiver station to instruct.

N.E.

40. The method of claim 36, wherein a controller controls a switch to communicate to a transmitter a selected signal, further comprising one from the group consisting of:

detecting a signal which is effective at the transmitter station to instruct transmission;

inputting to said controller a signal which is effective to control said switch;

controlling said switch to communicate one or more signals according to a transmission schedule;

controlling said switch to communicate from a specific one of a plurality of signal sources; and

controlling said switch to communicate a signal to a selected one of a plurality of transmitters.

41. The method of claim 36, further comprising one from the group consisting of:

transmitting to a receiver station at least one [or more] data that one of designates one of a time [or] and a channel of transmission of said instruct signal [or] and that [specify] one of specifies the title of [or] and some subject matter contained in one of a unit of mass medium programming [or] and data associated with said instruct signal; and

transmitting to a receiver station a control signal to cause said receiver station to tune to a broadcast or cablecast transmission containing a specific instruct signal.

04 42. The method of claim 36, wherein said at least one [or more] control signal[s] further comprises downloadable executable code targeted to said processor at at least one [or more] of said plurality of receiver stations, said downloadable executable code programming one of the way [or] and method in which said at least one processor responds to said instruct signal.

43. The method of claim 36, wherein at least one receiver station is adapted to detect the presence of one of said control signal [or] and programmed to respond to said instruct signal on the basis of the location of a signal in an information transmission, said method further comprising the step of causing at least some of said control signal or instruct signal to be transmitted in said location.